



MASENO UNIVERSITY

ATTACHMENT TITLE: INDUSTRIAL ATTACHMENT REPORT

Attached at:

James Finlays (kenya)limited

Finance (ICT department)

BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY

BY

CI/00084/014

Period

13 weeks from 02nd May 2018 to 31st July 2018

SUBMITTED ON:

SUPERVISED BY: Lawrence Langat

**ATTACHMENT REPORT IS SUBMITTED TO MASENO UNIVERSITY IN PARTIAL
FULFILMENT OF THE AWARD OF DEGREE IN BACHELOR OF SCIENCE IN
INFORMATION TECHNOLOGY**

August 2018

Declaration

I declare that this attachment report documentation embodies my own work and it has not been submitted elsewhere previously for any degree or diploma examination in any other university or college.

Student's Name : Timothy Oyaro

Registration No: CI/00084/014

Signature:

Date:

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Signature:

Date:

Acknowledgement

I take this chance to give gratitude to James Finlay Kenya Limited Management for their total support during my entire attachment period.

I wish to acknowledge the support of Shibry Mansoor (ICT Africa), Nelson Simiyu (IT Manager), my industrial based supervisor Mr. Lawrence Langat and the IT staff including Lorna Rugut, George Morara, Jeremiah Soi, Richard Rugut, Jesse Kuria and Felix Chatema for helping me acquire the necessary knowledge in my profession. Also I want to thank my assessor Mr. Gabriel oliko lecturer, Department of Information Technology, Maseno University for his supervision, encouragement and guidance.

I would like to extend my heartfelt gratitude to my family and friends for their love and unending support during my attachment period.

I will also like to thank my fellow Attachee Samson for his assistance and good teamwork.

May God bless you all.

Dedication

This industrial attachment report is dedicated to:

My Family

My lecturer Mr Gabriel oliko.

Executive Summary

This report covers the attachment period of 3 months at James Finlay (Kenya) limited situated in the outskirts of Kericho town. The report also highlights the attachment details featured during the training program. The attachment has been an educative experience because all the employees of the company have been an excellent team to work with and have tirelessly dedicated their time to get me through the company's day-to-day transactions. They have also contributed to making the attachment an educative and interesting experience by providing most of the information in this report. The company website has also been of great resource in drafting the report

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Acronyms

CCTV Closed-circuit Television

DSN Data Source Name

ERP Enterprise Resource Planning

ERP Enterprise Resource Planning

HIT Harvest Information Technology

HP Hewlett Packard

ICT Information and Communication Technology

IP Internet Protocol

JFKL James Finlay (Kenya) Limited.

ODBC Open Database Connectivity

Chapter 1

1.1 Introduction

Students are required to undergo an industrial based attachment program during which they are expected to acquire additional practical experience to add on their program of study in the College. They are also exposed to the real world of work and its challenges which will prepare them towards their career in future. (industrial attachment handbook, 2014)

The attachment period is a 2 months long program, offered at JFK. Thus, this report is the outcome of the 13 weeks practical training from 2nd May– 31st July working hours begin from 7:30 am to 4:30 pm each day. I would like to appreciate additional 1 month I was given

Maseno University requires all students be assessed in the company placed, thus, the program is supervised by the Company and assessed by a College Lecturer. This ensures the work done by the attachee is in accordance with his/her line of expertise and ensures the validity of any documentation or report submitted.

A successive day entails the attachee acquiring general and technical knowledge practically and relating it to information learnt theoretically in his field of study.

1.2 History of the organization

Finlays originated in Glasgow in 1750 as a trader and manufacturer of cotton. The company established direct trading links with India in 1816 and China in 1817. During the second half of the 19th century, representatives were sent to India to plant tea. From this point, Finlays started to play a leading role in the development of the global tea industry. (James Finlays, 2018)

In 1893 the business began its journey investing within Sri Lanka, initially entering the shipping business in Ceylon by taking over an agency of steamers. In 1894 the company began operating in Insurance Services and that same year embarked on its journey into tea within Sri Lanka, which today puts Finlays as a major producer and supplier of Ceylon tea to the global markets. (James Finlays, 2018)

During the 1920s, the company expanded its tea business into Africa, establishing estates and production facilities which continue to form a major part of our business today. Finlays

pioneered instant tea research, development and production in the 1960s, when the industry was still in its infancy. (James Finlays, 2018)

Towards the end of the 20th century, our cotton interests were replaced by financial services, onshore and offshore oil services, and a wide range of other businesses. By the early 1990s, however, we had reverted to concentrating on tea and tea-related activities and we are today, an international company, principally focused on tea. As contemporary drinking patterns change and the enormous potential of tea as a healthy ingredient in other products is developed, we are at the forefront of producing and marketing tea extracts and aromas in addition to more traditional forms of processing. This is highlighted by significant recent investments in China, Kenya and the USA. (James Finlays, 2018)

Finlays have also expanded our various non-tea businesses, principally around coffee, which has included the purchase of Autocrat in 2014, a coffee extraction business in North America. Finlays has also made sizeable investments in state-of-the-art cold store facilities in Colombo. (James Finlays, 2018)

Finlays now has a unique and integrated global footprint in the beverage industry. We own and operate tea estates, extraction facilities for tea, coffee and plant extracts, packing facilities and R&D labs across four continents. (James Finlays, 2018)

1.3 About Finlays-Kenya

Across 5,000 ha west of Kenya's Great Rift Valley, Finlays plants, plucks and prepares millions of kilograms of fine high grown black, green and organic teas, to the great benefit of the 9,500 people it employs and the communities it supports. (James Finlays(kenya)Limited, 2018)

In Kericho, which is 2,000m above sea level, we produce 23 million kgs of made tea every year. We benefit from the deep rich loam soils which are high in organic content. Combined with the ideal climate, we have the perfect environment for high yields of good quality tea. (James Finlays(kenya)Limited, 2018)

There are approximately 1,500 different varieties of tea in the world, all offering interesting and varied styles, taste and colour. The character of tea, like wine, is influenced by the elevation of

the garden, the soil, wind conditions and temperature and, of course, the quality of the plucking. (James Finlays(kenya)Limited, 2018)

The teas are very bright, colourful, with a reddish coppery tint and a pleasant brisk flavour. Kenya speciality tea is ideal as a drink for any time of day or night. (James Finlays(kenya)Limited, 2018)

At Kericho we are always striving for ways to reduce our impact on the environment. Our vision for energy supply is to be completely self-sufficient in electrical and thermal energy by 2030. Our aspiration is to generate all this energy in carbon neutral generating plants. (James Finlays(kenya)Limited, 2018)

Today, on our estate, we benefit from having access to large areas of forestry, of which we fell around 30 hectares per annum of timber. This timber is used to provide carbon neutral, thermal energy by burning the wood. At Kericho we pioneer and are proud of our initiatives to provide self-generating natural power sources (50% hydro-electric). (James Finlays(kenya)Limited, 2018)

Our people are at the heart of our business in Kenya. We employ 9,500 people who live on our estates; we provide them, and their families, with housing, schooling and medical services. This amounts to more than 11,000 houses, 13 dispensaries, 14 primary schools, 49 nursery schools, 1 secondary school and 3,000 kitchen gardens. (James Finlays(kenya)Limited, 2018)

1.4 Products they deal in

PRODUCTS AND SERVICES

Horticulture: Flamingo Holdings a wholly-owned subsidiary of Finlays, is a substantial horticultural business that includes growing, processing, packaging, marketing and distribution of cut flowers and premium prepared fresh vegetables, supplying several leading UK retailers (James Finlay, 2016)

Tea: Produces over 35 million kg per annum from 37,082 acres in Kenya and Sri Lanka. It is the largest independent tea trader in the world trading over 100 million kg from offices in the

UK, Kenya, Dubai, Malawi, Vietnam, Indonesia and the USA. Blending and packing over 14 million kg, JFK is the largest packer of Fair-trade tea and Fair-trade roast and ground coffee in the world. Trading in excess of 100 million kilos each year from our offices in the UK, Kenya, Dubai, Malawi, Vietnam and the USA (James Finlay, 2016)

Coffee: Blending and packing 2.5 million kg of coffee per annum. (James Finlay, 2016)

Tea Extraction: As the world's largest supplier of quality tea extracts, dealing with all of the world's top beverage companies. (James Finlay, 2016)

Beverage Packing: Finlay's is equipped with state of the art facilities in the UK and Sri Lanka, blending, sourcing and packaging. Primarily private label tea and coffee for customers in the UK, the Middle East and Japan (James Finlay, 2016)

Logistics and services: In Sri Lanka with the first modern refrigerated storage facility of any scale and a variety of primarily service-related businesses in both Sri Lanka and in Pakistan

Total Acreage under production: 57,721 (James Finlay, 2016)

Rubber: 4,248 acres in Sri Lanka producing 800,000 kg rubber latex per annum. (James Finlay, 2016)

Flowers: 800 acres under greenhouse or poly tunnel in Kenya and China producing over 430 million stems per annum for the UK, continental European markets and Japan. Sourcing and processing a total of 815 million stems in Kenya, the UK, China and Germany making Finlay one of the world's largest producers and packers of Fair-trade roses and lilies. (James Finlay, 2016)

Timber: 15,371 acres in Kenya and Sri Lanka. (James Finlay, 2016)

Coconuts: 500,000 nuts per annum in Sri Lanka. (James Finlay, 2016)

Vegetables: Growing and processing seven million kg per annum on 220 acres and sourcing a further 23 million kg per annum. (James Finlay, 2016)

Finlay's customers tend to be highly branded companies in a variety of markets spread out worldwide. They range from those in education, corporate sectors, retail point-of-sale, financial services and design. The company's reference list features some of the most respected companies, brands and organizations in the world.

1.5 Branch Network

Finlays mainly relies on orange fiber network for their internet supply. Lemotit farm which is located in Londiani is a substation which specializes in production of timber and flowers. For network connectivity it uses point to point where radio fiber is connected to Chomogonday, the highest point and another radio on a hill in Londiani. They are aligned in the same direction for easier communication.

1.6 Performance

Production in 2017 decreased by 7% to 440mkgs against 473mkgs recorded in 2016. This was attributed to hot and dry weather conditions in the first quarter of the year, and strikes at the end of the year. Normal weather patterns were expected to resume for the first quarter of 2018, however lower temperature persisted through march and April when the rains commenced, and the rains then continued into May (Finlays Magazine, 2018)

Despite the drought during the first quarter of 2017, frequent hail damage and industrial action during the final three months of the year, our own production was just 9% below budget. Our average selling price although 2% above the budget, was insufficient to compensate for lower productions. 2018 has got into a slow start, with many fields struggling from moisture deficit and the lingering effects of not being plucked during the strikes. (Finlays Magazine, 2018)

Within central service, logging division and the sawmill both performed ahead of the budget in 2017, with hydro and Central Engineering results slightly below. All divisions in central services recorded below budget performances in the first quarter of 2018 with logging division adversely affected by the government's 90-day logging ban, which is hitting the entire Kenyan tea industry. (Finlays Magazine, 2018)

1.7 contacts

JAMES FINLAY (KENYA) LIMITED
P O BOX 223,
CHEPKEMBE.
KERICHO 20200,
KENYAS

Chapter 2

2.1 Main functions or core activities of the host organization

The following are the main functions of the core host organisation

- ❖ Providing end-users with technical support services.
- ❖ Facilitating ICT capacity building in the company and its departments.
- ❖ Providing management support for the ICT resources.
- ❖ Providing leadership in the computerization of company's operational systems.
- ❖ Providing technical support services in the acquisition of ICT resources.
- ❖ Facilitating online delivery in the company through use of emerging technologies including communications, email and web applications

2.2 Vision, mission statement and core values of the institution.

2.2.1 Vision

To provide efficient and effective information and communication technology support services provision in the company

2.2.2 Mission statement

To provide ICT support service and enhance the company's service delivery through the use of information technologies.

2.2.3 Core values

- ❖ Trusted
- ❖ Innovative
- ❖ Sustainable

2.3 Organizational structure of the host institution

The ICT department has put in place a service charter to guide the department's daily operations and hence ensure that quality services are given to its clients. Therefore, the ICT department has defined the range of services it can offer, standards, obligations as well as its expectations.

The ICT department comprises of a total number of 15 working personnel. Each are assigned different duties. In the networking section it comprises of a network manager, network administrator and two technicians. In the ICT support section, it comprises of 8 personnel and help desk manger being overall. They are involved in solving daily problems in the business system, it includes business systems Manager, senior programmer and database Administrator they are mainly involved in the database

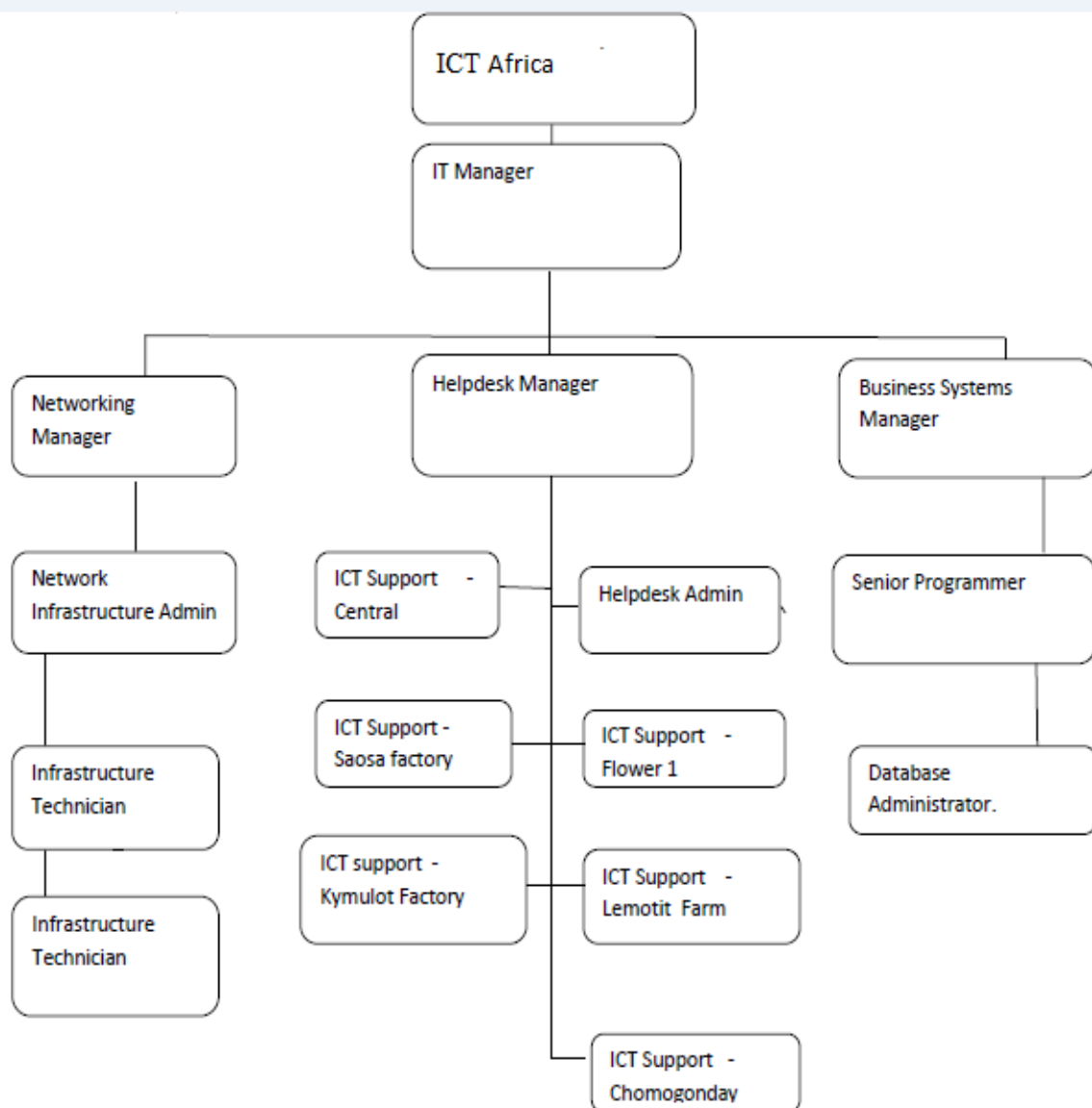


Figure 1 organization structure (bett, 2018)

2.4 Duties and responsibilities of the key personnel in the organization

2.4.1 Duties

The duties that the ICT department provides are summarized as follows:

- ✓ Responding to user ICT technical support requests
- ✓ Diagnosing ICT problems
- ✓ Resolving ICT problems
- ✓ Provision of ICT technical specifications
- ✓ Management of ICT resources
- ✓ Training of users on the use of new ICT resources
- ✓ Automation of manual functions
- ✓ Servicing and maintenance of ICT equipment
- ✓ Acknowledging and responding to enquiries and correspondence

2.4.2 Standards

The department is committed to meeting the needs of clients in a professional manner. Clients should therefore expect the following standards from the ICT department:

- Providing quality services for all.
- Service for all.
- Clear and concise information
- Providing prompt, accurate and relevant information.
- Answering telephone calls.

i. Courteous service

Every client is entitled to courteous treatment by the serving officer.

ii. Dealing with queries

The unit will acknowledge and respond to all ICT queries, written correspondence and emails within one working day on receipt. If the subject matter is more complex and requires greater attention, the enquirer will be contacted to explain the reason for the delay and where possible, advise on when a response would be available. If prolonged investigations are needed, the enquirer will be informed of the progress within one working day.

iii. Listening to clients

The ICT department endeavors to listen to the customers' views and suggestions at all times.

iv. Focus on results

The department will employ innovative and best management practices to achieve the set performance targets. It will also ensure e-mail and web server uptime at least 99.9%.

2.5 ICT Assets

The ICT department has invested in a wide range of assets that can be categorized as either Hardware or Software and which are intended to help it achieve its goals.

Each department has different hardware/software implemented depending on the services they render to the company all of which have licenses.

Hardware

I came across many different machines, which included: Printers, Desktop Computers, Laptops, Biometric clocks, and Networking Essentials.

Printers

- Kyocera Miter Printer
- HP LaserJet

Desktop Computers and Laptop

- HP (Hewlett Packard)

Networking Essentials

- Ethernet Switches
- Server Software's
- Client Software's,
- Fiber/ Radio

Software

- Application Software –Microsoft Office 2007 Enterprise/2010/2013/2016, Sophos Antivirus, Harvest it (HIT).
- Operating System -windows 7 pro ,and windows 10 pro

They have used local area network with category 6 shielded twisted pair cable and have windows 7 based application, used to create user accounts for the company uses Windows server 2012 server. The company also uses wireless network from service providers e.g. Safaricom, Airtel and Orange and also access Kenya for internet solution

2.6 Objectives of industrial attachment

Industrial attachment seeks to;

- I. Enhance training and develop the practical and communication skills/competencies of the attachees.
- II. Provide a mechanism for the school to get feedback from the ICT industry about the performance of students on industrial attachment.
- III. Strengthen liaison between the ICT industry and the School of Computing and Informatics for possible mutual benefits.

2.7 Benefits of industrial attachment

To attachees

The industrial attachment seeks to offer students a practical translation of the theory they have been taught. Through this attachment, I have generated a good interpersonal relationship through my interaction with my supervisors and colleagues. This has assisted me to interact confidently with people irrespective of the position.

To the College

The skills portrayed or shared has created an individual benefit of liaising the College to the industries, hence brightening the employment chances of the students in the respective College. Through my attachment period, I have shown the great skills acquired from the College and proven that Maseno University is an outstanding learning Institution.

To the Company

During the period attached, I have managed to learn and even share my knowledge with fellow colleagues and attaches at JFK Ltd. I have proven competent and industrious in my field of study, leading to the urge of JFK Ltd to complement the work done

Chapter 3

3.1 FIELD WORK ACTIVITIES

Working at James Finlays (kenya)Ltd enabled exposure to field activities during attachment period. It is important for attachees to learn about the different ICT related issues that may be experienced in the field. In order to achieve user satisfaction, the Company set up different technological advancements during my attachment period. In the field, interacting with people from different ethnic groups increased my communication and interpersonal skills.

Most of the field activities relied on computer Maintenance, Service, Networking and Communication, thus, I got a chance to show the skills learnt from the institution. This also helped me gain more practical experience to my networking skills.

3.1.1 Installations of CCTV camera

This was mainly done by configuring the camera. The camera was configured using special SDAP tools. This helped removing default IP address. The CCTV (Closed-circuit Television) camera was mounted and aligned. For viewing the camera, the NVR switch was configured using the assigned IP (Internet Protocol) address to enable viewing. The CCTV helps to monitor the activities that are happening.

For places where cables could not be passed Ubiquity Nanostation where used. They acted as a station and access point they were configured and assigned unique IP address. The station was connected to the switch. Assigning unique IP address enabled communication.



Figure 2 Dome CCTV and NVR Switch

3.1.2 Networking

The IP phone system refers to Voice over IP, or having your phone calls routed over the internet or your LAN. **This is great for many reasons;** You don't have to use the telephone network of your telephony service provider for making calls, which will reduce your costs for phone calls. And one is able to gain many technical advantages by using IP technology for your telephony. Testing faulty line using cisco phone.

3.1.3 Optical Fiber Termination

I was introduced to a single mode and a multimode fiber optic cable on which I was shown on how to terminate the cable using Single Mode Splicing Kit. This is a special type of terminator since it protects the ferrule which is the part of the Fiber optic cable from dust and scratches. I was shown how to connect this cable to an Ethernet fiber optic switch which has 24 ports and provides 24*100 mbps fast Ethernet Fiber ports

I learnt how to use fiber optic loop back tester to test the connections in the network and how to connect fiber optic converter(Media converter) so that the signals coming from the UTP cables can be transformed from light signals to electrical signals. I

learnt how to use single mode fusion splicer to join fiber optic cables together and how to test the distance which is good in meters.ITDR was used.



Figure 3 Fiber cable



Figure 4 single splicing kit

3.1.4 Installation of UNIFI

This is done by assigning unique IP address. UNIFI helps to set provide WIFI to a wide area.to achieve this UTP CAT 6 needs to be runned from the switch to the UNIFI.



Figure 5 UNIFI

3.1.5 cable harnessing

Cable harnessing helps to ensure cables are correctly harnessed. This ensures uniformity and ensure cables are not harzadly connected. This was achieved using floor wire guard, surface pillar and cables tiers. Also moving of Giganet cabinet was done. The skills acquired was importance of harnessing cable.



Figure 6 cables not arranged

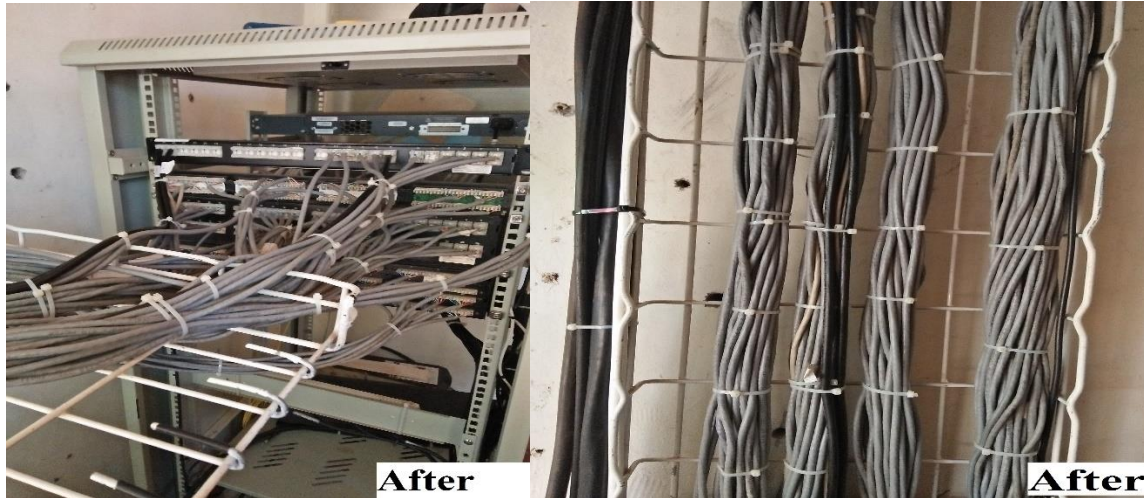


Figure 7 cables Harnessed

3.1.6 Office Activities

During the period, I managed to use my skills and even learn more through the various office activities, which include:

- Trouble shooting the printer

Printers are the most used peripherals in an office environment may encounter Problems at times. The printer encountered a paper jam problem was observed that the Paper does not exist in the exit tray as the printing process continues. learnt how to remove the paper from the printing drum and keep the papers on separate pad So that the papers can move in unison with the exit rollers. Also where user where enable to connect we were

- Installation of operating system.

I was shown how to create partitions in the hard drives so that the PC can dual boot after, was also shown how to install the drivers keeping in mind about the Hardware compatibility then how to configure the operating system by assigning the IP Addresses to the PC on which the operating system was installed. The skill acquired was How to install Windows 7/10 PRO operating system using the hard drives partitions so that the computer Can dual boot.

- Repairing and replacing battery ups

Faulty UPS machines are brought back to the department for repairs. Most of them are due to worn out batteries. I was shown how to test batteries' voltage and replace if it has less than recommended amount of voltage. Testing was done using Multimeter

- Computer service

Users bring faulty machines to the ICT department for repair. Due to this, I managed to receive machines with worn out Processors, Hard disks, RAM and/or missing other Computers parts. I have learnt how to check for issues in the machines, and thus, I can as well fix all the computer parts.

3.1.7 SportsDB

This was involved by installing visual Basic for database. We inserted user on the database(DB) who were to participate on the sports events. Inner joint the participants their cr no. and the employee no. this helped to ensure those who participate are working with the organization. Installed SQL server to ensure there is connectivity installed the set up SportDB. We were able to generate certificate within the required time. A dry run was performed the actual day of the event.

3.1.8 installation Biometric

For biometric to work it requires a power and back up of power. This helps to ensure it is fully functioning. The biometric was assigned a unique IP address. The sample of a fingerprint was taken by USB fingerprint scanner this was done after ZK Time clock was installed on a laptop. Test was done to ensure it was working properly.

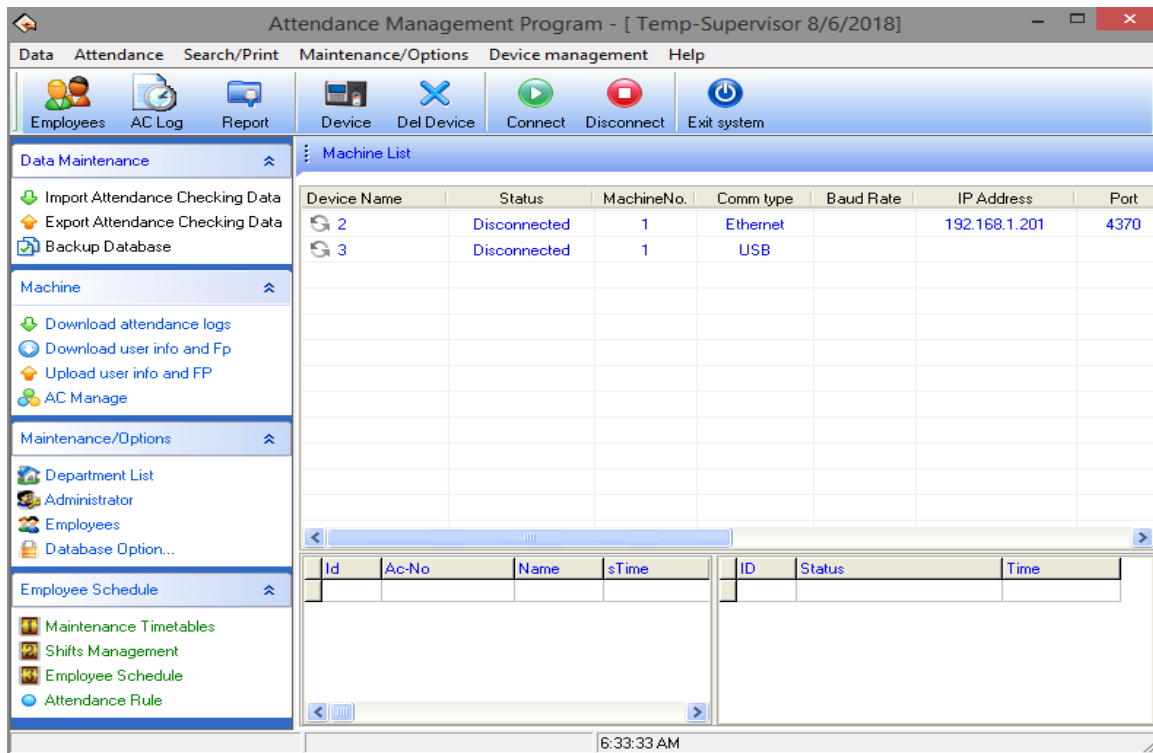


Figure 8 Time and Attendance

3.2 Daily activities

- Assembling and configuration of new machines and peripherals for users. When new machines were brought I was assigned a work to assemble and configure it to work well and also in the network.
- Installation and configuration of operating systems (windows 7 and 10) and application programs. I was able to format, install and configure OS and programs in computers which were faulty or new.
- Computer hardware and software troubleshooting. When users had issues with their computer software and hardware I was able to troubleshoot and diagnose the problems and repair where necessary
- Assisting in supporting HARVESTit (ERP). This is the system software that is being used in the company which was controlling everything in the company ranging from transactions, payment, and stock to machine operations of the entire company.
- Installation and updating of antivirus software regularly. I was able to install and update SOPHOS antivirus on all the computer systems in the company on a regular basis.
- Carry out routine maintenance on hardware and software. Computer maintenance was done on regularly basis, therefore I used to clean and ensure that all the computers in the company are up and running
- Support of MS Outlook and Express Mail. The company users use Outlook for their mails, in case of user issues I used to help them. This was mainly done by backing up and restoring users data. Also looking for old mails and educating users on how to office 365 on the browser.
- Participate in network harnessing. This was done by ensuring that cable are uniformly cabled using cable ties and protected by floor wire.
- Mapping and using ERP system (HARVESTit). This is done when a computer fails or in the training room for training purposes.
- Repairing of scales. This was done by testing the power supply on the motherboard and replacing Faulty motherboard. Calibration was done to remove faulty reading error

3.4 EXPERIENCE, SKILLS AND KNOWLEDGE ACQUIRED DURING ATTACHMENT PERIOD

SKILLS AND KNOWLEDGE GAINED

Having skills is a continuous process which is facilitated by taking interest, learning and Observation. I learnt DOS command for troubleshooting different problems e.g. ping and tracer for Troubleshooting network problems. Different ways of upgrading the system e.g. changing memory and Central Processing Unit (CPU) by correctly reseating the DIMMS to the motherboards during PC maintenance session, I got to know how Cisco router works.

On attachment one is able to sharpen his/her competence skills i.e. I was able to diagnose a Problem and came up with a solution pertaining to it with minimal supervision. During attachment practice I was able to learn new things like effective and efficient user support services and teach the user on how to be conversant with the newly introduced system e.g. Harvest IT software. Attachment creates confidence in tackling a similar problem in the near future and working under pressure with a cool and relaxed mind.

Attachment broadens your mind on the IT technologies e.g. optical fiber Technology. It facilitates gaining the necessary experience and knowledge in the ICT Industry by being exposed to various challenges in the field. By being exposed to the IT problems and challenges, I become an asset to the corporate world was able to deal with elements of Uncertainty or unpredictable conditions.

During the attachment period I learnt to work independently and to make judgments on my own thus I have known the dynamics of a working environment where by the customer or client comes first. I gained a lot of skills in terms of teamwork, leadership, independent work, Analytical skills and industrial contacts.

3.5. Success/ failure of the attachment exercise vis- a – vis student's main objectives.

I had much success in my attachment. I had the opportunity to show my workmanship and apply what I have learned in class and accomplish what was given to me.

One of the main objectives is to enhance skills and develop the practical and communication skills. During my industrial attachment I was able to gain skills as mentioned above.

Communications skill being one of the requirement in both in the university and the

organizations I was able to pass information in the manner required. TeamViewer was used remotely to guide user on how to access what they want.

The second objective was achieved when the lecturer visited James Finlay ICT department. He was able to get information from the it manager, supervisor and the student. This has led to establishment of good relationship.

Not only I have managed to be attached in James Finlays ICT department but many who have come before me. This has led to establishment of good liaison between the organization and the school of computing.

3.6 Challenges encountered by the student during the attachment period.

In everyday activities, some set back and challenges were met at the working place. At times the work given during the attachment period didn't meet their expectations. Insufficient access to the server software and server room since it is limited to IT Network Manager for security purposes thus I was unable to learn how to configure the server, but I managed to install the components

How to use arc fusion splicer to join fiber optic cables was another challenge since we were never taught at the university any tool used in fiber optic yet they are very many which we are required to use them in day to day activities in the world.

Learning how to terminate class B on max module

How to terminate CAT 6 using crimping tool. That is connecting using rj45

No clear work schedule

3.7 How the challenges were overcome /solved.

I was trained on how to install the server

I was trained to terminate class B and crimp CAT 6 using rj45.

I had to ask each day on what I was expected to do.

Trough reading materials I was able to understand arc fusion fiber splicer what is used for and importance of fiber.

Recommendation

To the organization

The ICT department should discourage the sharing of confidential files and documents over the local network and also put measures in place to make sure this is adhered to. For example, revoking administrative rights on the computers whose users have no need to access/view confidential files.

They should provide clear work schedule.

To the institution

- ❖ Students should be provided with more practical session than theory because most of theories are found in books thus practical will enable one to have the knowledge of handling and Performing tasks when out on fieldwork
- ❖ The industrial attachment should be twice

Conclusion

The period of Industrial Attachment with JFKL was an immeasurably valuable experience, which nurtured me into a more capable professional. Skills have been gained technically, professionally and socially. This training has helped me to gain enormous technical knowledge and insightful experiences in a real working environment.

The industrial attachment has enabled me to acquire many different skills that my class work could not adequately cover and also to apply only what I knew in theory. I also had the advantage of being exposed to the work environment and experience the challenges that employees face in their day to day activities.

I have also learned how to solve the different problems that may come up at the work place, and acquainted myself with the physical, technical, academic and environmental requirements of similar possible future positions.

References

bett, M. (2018, july 20). ict support. (t. oyaro, Interviewer)

Finlays Magazine. (2018, June). Tea, Tea Estates Kenya. *A Royal Visit*, 55(1), 7,14.

industrial attachment handbook. (2014).

James Finlay. (2016). *James Finlay*. Retrieved from Finlays: www.finlays.net

James Finlays. (2018). Retrieved from James Finlays: <http://www.finlays.net/our-business/history/>

James Finlays(kenya)Limited. (2018). Retrieved from <http://www.finlays.net/our-products/tea/estates/kenya/>

nelson. (2017). ict polixies.